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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/044,615	01/11/2002	Troy A. Miller	DEAU /37	9471

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EXAMINER
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KRAMER, DEVON C

ART UNIT	PAPER NUMBER
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3683

DATE MAILED: 12/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/044,615

Applicant(s)

MILLER ET AL.

Examiner

Devon C Kramer

Art Unit

3683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 3-5, 9, 10 and 18 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13-17, 19 and 20 is/are allowed.
- 6) ☒ Claim(s) 1-2 6-8 11-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

1) Applicant's election with traverse of species II (figure 4) in Paper No. 14 is acknowledged. The traversal is on the ground(s) that if the search and examination of the entire application can be made without serious burden, the examiner must examine it on the merits even though it includes claims to independent or distinct inventions. This is not found persuasive because applicant's arguments with respect to the 103 rejections as applied to the claims has caused the examiner to search in other areas. For example, the examiner has to find a teaching of a fluid tight seal formed by a weld. Please note that the examiner used references classified in the shocks to reject the claims under 103, but applicant argued that all the combinations were not proper. Therefor, other areas must be searched in order to make "proper" rejections.

The requirement is still deemed proper and is therefore made FINAL.

2) Claims 3-5, 9-10 and 18 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 14. Claim 18, seems to be directed to figure 5 and was not included in applicant's reply directed to the election of species. Claim 18 has been treated as being directed to a non-elected species.

***Claim Rejections - 35 USC § 102***

Art Unit: 3683

3) The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4) Claims 1-2 and 11-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Engel et al (5207300).

In reference to claim 1, Engel et al provides a suspension damper comprising: a cylinder (1) defining a cavity being substantially filled with a fluid; a piston (3) slidably positioned in the cylinder separating the cavity into a compression chamber and an extension chamber; a rod (2) coupled to the piston and extending through one of the chambers and exiting the cavity; a tapered interface (at threads or at insteps as rod attaches to piston) between the rod and the piston to thereby align the rod relative to the piston; a passage (5) through which the fluid moves between the extension chamber and the compression chamber during sliding of the piston in the cylinder; an air pressure actuated control valve assembly (8) responsive to an air pressure input for adjustment to and between an open position, a closed position, and at least one position intermediate the open and closed positions to control the movement of fluid in the passage between the extension and compression chambers (col 4 lines 9-15); wherein the damping force of the suspension damper is a function of the air pressure input; and wherein the tapered interface provides a fluid tight seal.

Art Unit: 3683

In reference to claim 2, Engel et al provides a suspension damper where a shoulder on a portion of the rod; and a confronting surface on a portion of the piston proximate the shoulder constitute the tapered interface.

In reference to claim 11, Engel et al provides a suspension damper comprising: a cylinder (1) defining a cavity being substantially filled with a fluid; a piston (3) slidably positioned in the cylinder separating the cavity into a compression chamber and an extension chamber; a rod (2) coupled to the piston and extending through one of the chambers and exiting the cavity; a tapered interface (at threads or at insteps as rod attaches to piston) between the rod and the piston to thereby align the rod relative to the piston; a passage (5) through which the fluid moves between the extension chamber and the compression chamber during sliding of the piston in the cylinder; an air pressure actuated control valve assembly (8) responsive to an air pressure input for adjustment to and between an open position, a closed position, and at least one position intermediate the open and closed positions to control the movement of fluid in the passage between the extension and compression chambers (col 4 lines 9-15); wherein the damping force of the suspension damper is a function of the air pressure input; wherein the tapered interface provides a fluid tight seal; a uni-directional seal plate (8) mounted in the piston assembly and in communication with the air-pressure actuated control valve; wherein the uni-directional seal plate (8) is adapted from mounting in the piston assembly in a predetermined orientation.

In reference to claim 12, Engel et al provides a seal plate where a step extended around a perimeter thereof

***Claim Rejections - 35 USC § 103***

5) Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Engel et al in view of de Molina (5725239).

Engel teaches all of the claim limitations (see 102 rejection above), but lacks the teaching of controlling the valve in response to a function of weight and a condition of the road.

De Molina teaches the practice of varying the damping in response to a vehicle weight and a condition of a road.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have provided the assembly of Engel with means to vary the damping rate in response to weight and road condition as taught by De Molina in order to provide a driver with a more comfortable ride and to improve the performance of the vehicle.

***Allowable Subject Matter***

6) Claims 13-17 and 19-20 are allowed.

***Conclusion***

7) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Devon C Kramer whose telephone number is 703-305-0839. The examiner can normally be reached on Mon-Fri 8-4.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Lavinder can be reached on 703-308-3421. The fax phone numbers

Art Unit: 3683

for the organization where this application or proceeding is assigned are 703-308-3519 for regular communications and 703-308-3519 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1134.

DK  
December 8, 2003

  
JACK LAVINDER  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600